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Chapter 2

Planning Process

During the planning process, the State of Kansas coordinates its efforts with other agencies and planning initiatives. This chapter seeks to document the process utilized to update this plan. It is divided into three parts:

- Documentation of the Planning Process
- Coordination among Agencies
- Integration with other Planning Efforts

2.1 Documentation of the Planning Process

Requirement 201.4(c)(1): The plan must include a description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

The Kansas Hazard Mitigation Team followed FEMA's recommended four-step mitigation planning process which incorporates the Disaster Mitigation Act of 2000 planning and update requirements and FEMA's associated guidance for state hazard mitigation plans:

- Identify and organize available resources
- Identify hazards and assess risk
- Develop a mitigation strategy and mitigation plan
- Implement the plan and monitor progress

The Kansas statewide mitigation-planning program's design is twofold: coordinate the efforts of many state agencies and organizations in mitigation planning and programming on an ongoing basis, and actively promote and coordinate mitigation planning and programming by local jurisdictions. Specifically, mitigation planning in Kansas is designed to:

- Encourage and facilitate a multi-organizational, multi-jurisdictional approach to mitigation planning, striving to develop interrelated and coordinated plans and programs at both the state and local levels:
- Use a consistent and valid, but practical, technical approach to mitigation plan development to allow statewide comparability of information, regardless of the jurisdiction or level of government;
- Promote a mitigation planning process that prioritizes available time and resources to address
 the highest risk hazards confronting the communities of Kansas and the mitigation goals that
 have been established at the state and local levels; and
- Recognize that mitigation planning and programming must be an ongoing process that can never be fully completed due to continual changes in the communities of Kansas, in the

hazards they confront, as well as the resources and capabilities available to mitigate vulnerabilities to those hazards.

2.1.1 Evolution of the State Hazard Mitigation Plan

Kansas Hazard Mitigation Team

The Kansas Hazard Mitigation Team (KHMT) is responsible for the development, implementation, and maintenance of the Kansas Hazard Mitigation Plan. The KHMT is comprised of representatives of the principal state agencies and organizations with authorities, responsibilities, or expertise related to hazard mitigation programs and meets on a quarterly basis. The Kansas Commission on Emergency Planning and Response chartered the KHMT in 2001. The charter for the KHMT, **Figure 2.1**, stipulates its duties, membership, and responsibilities.

• Figure 2.1 Charter of the Kansas Hazard Mitigation Team

Charter of the Kansas Hazard Mitigation Team

- 1. Purpose: To assess hazard mitigation needs, develop and implement statewide hazard mitigation policies, promote coordination of mitigation programs at all levels of government; pursue alternate mitigation funding strategies;
- 2. Powers and Responsibilities: The Kansas Hazard Mitigation Team shall have the following functions, powers, and duties:
 - a. The development and maintenance of an effective statewide Hazard Mitigation Program, involving all levels of government encouraging government officials to continually strive to promote Hazard Mitigation, and develop disaster cost-reduction initiatives.
 - b. Determination of the capabilities of each State and Federal agency to address various hazards, including the legal authority of each agency and the programs and funding sources available to address mitigation activities:
 - Active participation in the development, implementation and maintenance of a comprehensive State
 Hazard Mitigation Plan, with the support of the Division of Emergency Management, Adjutant General's
 Department;
 - d. Designate teams to focus on researching, developing, reviewing, specific policies or processes of various hazard mitigation aspects;
 - e. Coordinate all hazard reduction programs, objectives and procedures to carry out these objectives through
 - i. Coordinated strategies to further common program objectives,
 - ii. Identification and evaluation of common priorities for each program,
 - iii. Review and make recommendations on applications for program assistance,
 - iv. Coordination of mitigation activities with local and Federal government programs,
 - f. Propose statewide mitigation policies to the Governor, Commission on Emergency Planning and Response, and agency heads.
 - g. Recommend methods to improve mitigation activities of State agencies, local governments, Federal government, and private industry; and
 - h. Review grant applications to make funding recommendations to appropriate agencies, and
 - i. Seek innovative means to effect solutions to known hazards.
 - The Adjutant General's Department, Division of Emergency Management, shall provide staff support for the Kansas Hazard Mitigation Team.
- 3. Membership:
 - a. Core Hazard Mitigation Team will be composed of authorized representative(s) from:
 - i. Adjutant General's Department
 - ii. Kansas Department of Agriculture
 - iii. Kansas Department of Commerce and Housing
 - iv. Kansas Department of Health and Environment
 - v. Kansas Department of Transportation
 - vi. Kansas Legislative Research Department

- vii. Kansas State Historical Society
- viii. Kansas Water Office
- ix. Kansas Wildlife and Parks
- b. The Kansas Hazard Mitigation Team's membership may be expanded, when additional expertise is needed for specific hazards, to include the following state, agencies:
 - i. Kansas Biological Survey
 - ii. Kansas Corporation Commission
 - iii. Kansas Department of Administration
 - iv. Kansas Department of Education
 - v. Kansas Department of Human Resources
 - vi. Kansas Department on Aging
 - vii. Kansas Forest Service
 - viii. Kansas Geological Survey
 - ix. Kansas Highway Patrol
 - x. Kansas Insurance Department
 - xi. Kansas State Fire Marshal's Office
 - xii. State Conservation Commission
- c. To ensure representation of Federal partners the following agencies will be invited to participate on the team:
 - i. Environmental Protection Agency
 - ii. Federal Emergency Management Agency
 - iii. Housing and Urban Development
 - iv. National Weather Service
 - v. U.S. Army Corps of Engineers
 - vi. US Department of Agriculture
 - vii. US Department of Health and Human Services
 - viii. US Department of Interior, Bureau of Reclamation
 - ix. US Economic Development Administration
 - x. US Geological Survey
 - xi. US Railroad Administration
 - xii. US Small Business Administration
- d. To ensure representation of local governments the following associations will be invited to participate on the team:
 - i. Kansas League of Municipalities
 - ii. Kansas Association of Conservation Districts
 - iii. Kansas Association of Counties
 - iv. Kansas Rural Water Association
 - v. State Association of Kansas Watersheds
- 4. Chairperson: Selected annually by the Core Hazard Mitigation Team members.
- 5. Vice-Chairperson: Designated by the Chairperson.
- 6. Frequency of Meetings and Time Allotted: The Kansas Hazard Mitigation Team shall have authority to convene as necessary, and the Chairperson will be responsible for finalizing agenda issues and determining meeting times.
- Level of Empowerment: provide advice, assistance and make recommendations, evaluation and endorsement of mitigation projects.
- 8. Feedback: Publish meeting summaries. Report to the Kansas Emergency Preparedness and Response Commission on a semi-annual basis.

Previous State Mitigation Plans

In January 2002 the initial Kansas Hazard Mitigation Plan was accomplished, titled the Kansas Hazard Mitigation Strategy. In 2004 this plan was updated according to the FEMA guidance developed to meet the requirements of the Disaster Mitigation Act of 2000. During the 2007

update the plan underwent a significant overhaul and was converted into a common word processing program and was reorganized to follow the FEMA planning guidance and state plan review crosswalk. For the subsequent plan updates in 2010, 2013, and 2018 this format was continued.

2.1.2 2018 Plan Update Process

In September, 2017, The Kansas Division of Emergency Management (KDEM) initiated the planning process to update the Kansas Hazard Mitigation Plan. The State Hazard Mitigation Officer (SHMO), and the State Mitigation Planner served as the lead. Unlike previous plans, it was decided that the 2018 update for the State Mitigation Plan would be accomplished by the State Mitigation Planner. The following milestones were to be met:

- Attend and facilitate planning process update meetings at the quarterly meetings of the KHMT.
- Ensure the plan update meets the DMA requirements as established by federal regulations and following FEMA's state plan update guidance.
- Identify the data requirements that KHMT participants should provide and conduct the research and documentation necessary to augment that data.
- Complete HAZUS flood and earthquake loss estimations, integrating local level risk assessments, improving statewide vulnerability assessment, improving vulnerability analysis of state facilities.
- Produce the draft and final plan documents, and
- Coordinate the FEMA Region VII plan reviews.

Coordination with the Kansas Hazard Mitigation Team

As a chartered, long-standing working group tasked with the maintenance of the Hazard Mitigation Plan, the KHMT was the perfect venue for the 2018 Kansas Hazard Mitigation Plan update process. Beginning in September 2017, the update process was added to the quarterly meeting agendas.

The kickoff meeting invitation along with the meeting agenda was sent out via email in August 2017 by KDEM. **Figure 2.2** shows a copy of the invite and all meeting sign-in sheets, agendas and meeting minutes are maintained at KDEM as Supplemental Documentation, available upon request. In addition to the chartered members, various state and federal agencies were invited by KDEM to participate in the KHMT for the 2018 plan update. The agencies' participation was based on their previous involvement with state mitigation planning activities, the KHMT charter, or their stake in reducing hazard losses in Kansas.

Figure 2.2. Kickoff KHMT Meeting Invitation

Dear Department Representative/Hazard Mitigation Team Member:

The Kansas Hazard Mitigation Team would like to invite your organization to participate in the 2018 Kansas Hazard Mitigation Plan Update process. The Kick-Off Meeting is scheduled for September 26, 2017, from 9:30 am to noon. You are receiving this email because you are currently a member of the Kansas State Hazard Mitigation Team or because you have been identified as a new committee member for the new update cycle.

The State Hazard Mitigation Plan is a critical requirement for securing Federal Emergency Management Agency mitigation funding for the state of Kansas. Our current plan expires in November 2018, so it is once again time to begin the planning process.

The hazard mitigation planning process is heavily dependent on the participation of representatives from state and federal agencies, the public, and other stakeholder groups. We hope you will please plan to attend and/or designate a representative to attend the kickoff meeting, which will discuss the benefits of updating Kansas' hazard Mitigation Plan, the project schedule, and data needs from other agencies.

State of Kansas Hazard Mitigation Plan Kickoff Meeting

Date: September 26, 2017 Time: 9:30 a.m. - noon Place: Historical Society 6425 SW 6th Ave

Topeka, Kansas 66615

If you have any questions, problems or concerns please do not hesitate to email me at the email address below, or give me a call at (785) 274-1973.

Sincerely,

Jacob Gray State Hazard Mitigation Officer Jacob.s.gray.nfg@mail.mil

State agency participation was defined early in the planning process and presented at the KHMT kickoff meeting. Participation guidance asked KHMT members to:

Attend meetings (or send a designee),

- Assist with data collection,
- Review plan drafts,
- Integrate with other planning mechanisms,
- Coordinate with other agencies, and
- Provide input to mitigation strategy/actions.

At the kickoff meeting, the planning team discussed the purpose and requirements of the state plan update, reviewed the role of the KHMT, roll-up of Local Plans, update/revision of the hazard rankings and associated Calculated Priority Risk Index from the 2013 plan, update the risk assessment, and the project timelines. **Table 2.1** lists the dates and purposes of the KHMT meetings during the 2018 update planning process and the meetings prior to the plan update process. Data Collection Guides were distributed at the 1st meeting to gather state agency capability updates and changes.

Table 2.1. Meetings of the KHMT during the 2018 Plan Update Process

	Meeting	•	Date	Purpose			
•				•			
•	1. Project Kickoff	•	09/26/2017	 Hazard Mitigation Projects update Regional Hazard Mitigation Planning Review Disaster Mitigation Act planning requirements Review role of KHMT Roll-up of Local Plans Hazard rankings and Calculated Priority Risk Index Update of risk assessment Plan update timeline Update on Silver Jackets pilot projects Distribute information guides for capability input 			
•	2. Risk Assessment Draft Part 1, 2	•	12/13/2017	 Hazard Mitigation Projects update Regional Hazard Mitigation Planning update Review and comment on draft risk assessment part 1 and 2 Update on Silver Jackets pilot projects 			
•	3. Mitigation Strategy	•	03/29/2018	 Hazard Mitigation Projects update, FEMA-DR-4112 Regional Hazard Mitigation Planning update Draft Risk Assessment includes Integration of Local Hazard Mitigation Plans and the State Owned and Operated Facilities: Vulnerability and Loss Estimates Key Issues from Risk Assessment Status of Mitigation Actions from 2013 Plan Develop New Mitigation Actions Any changes in State Capabilities Review and update plan goals and objectives Review and update plan maintenance Update on Silver Jackets pilot projects 			
•	Meetings of the KHMT Prior to the 2018 Plan Update Process						
•	KHMT Meeting	•	06/20/2017	 KDA/DWR Update: KAFM Conference, Current Projects, NFIP 101 USACE Silver Jackets Update/Project Proposals Hazard Mitigation Project Updates – DR-4287, DR-4304 Hazard Mitigation Planning Updates 			
•	KHMT Meeting	•	03/28/2017	KDA/DWR UpdateASFPM 2017Current Projects			

•	Meeting	•	Date	Purpose
				 City of Chapman Project Update Climate in the Heartland USACE: Silver Jackets, Levee Database Updates Hazard Mitigation Planning Update Hazard Mitigation Project Update Recent Wildfire (Mitigation Strategies)
•	KHMT Meeting	•	09/20/2016	 KDA/DWR Update USACE Current Happenings Hazard Mitigation Planning Update Hazard Mitigation Project Update
•	KHMT Meeting	•	06/14/2016	 KDA/DWR Update USACE Current Happenings Hazard Mitigation Project Update Hazard Mitigation Planning Update
•	KHMT Meeting	•	03/08/2016	 KDA/DWR Update Nepal Earthquake Presentation USACE update (Levee Safety Programs, Flood Risk Mgmt, Interagency Projects, Future Proposals) Hazard Mitigation Project update Hazard Mitigation Planning Update
•	KHMT Meeting	•	09/22/2015	 KDA/DWR Update State Climatology Report USACE Silver Jackets Update Hazard Mitigation Project Update Hazard Mitigation Planning Update
•	KHMT Meeting	•	06/23/2015	 KDA/DWR Hud Grant Update USACE Silver Jackets Update, Current Flood Fight Situation Hazard Mitigation Project Update Hazard Mitigation Planning Update Log Jams/Mitigation – can we do more PDM/FMA Prioritization and Solicitation of Future Applications
•	KHMT Meeting	•	03/31/2015	 KDA/DWR Update (HUD Grant, LIDAR) USACE Levee Safety, Silver Jackets Update FEMA State Mitigation Plan Review Guidance Hazard Mitigation Project Update Hazard Mitigation Planning Update PDM/FMA Prioritization and Solitation of Future Applications, FMA guidance, money
•	KHMT Meeting	•	12/16/2014	 KDA/DWR Update Earthquake and Fracking via KS Geological Survey USACE 2011 MO River Flooding Lessons Learned, Silver Jackets Update Wildlife, Parks, and Tourism Update and Current Happenings Hazard Mitigation Project Update Hazard Planning Update PDM/FMA Prioritization and Solicitation of Future Applications
•	KHMT Meeting	•	09/30/2014	 Hazard Mitigation Project Update Hazard Mitigation Planning Update KDA/DWR Update Commerce – Information on potential grant funding from other state sources FEMA Info/Update from FEMA Region VII Planning Staff USACE – Annual FRM Conference, outcome, Interagency Projects, Drought Mitigation Actions, Levee Safety Program Update 184th Imagery discussion of mission and future needs
•	KHMT Meeting	•	06/10/2014	Hazard Mitigation Projects Update

•	Meeting	•	Date	Purpose
				 Hazard Mitigation Planning Update DWR/KDA Update USACE: Pilot Project, Annual Flood Risk Management Conference, Emergency Management, Levee and Dam Safety Programs PDM/FMA open discussion
•	KHMT Meeting	•	03/12/2014	 Hazard Mitigation Projects Update Hazard Mitigation Planning Update Legislative Update to BW-12 by KDA/DWR Disasters 4150 Letters of Intent Disaster 4412 Pre-Applications KDA/DWR Risk Map Update, Future Prioritizations PDM/FMA Discussion for FY 14
•	KHMT Meeting	•	11/26/2013	 Hazard Mitigation Projects update Local Hazard Mitigation Plans update NOAA Atlas 13 understanding International Charter (Space and Major Disasters) KS Biological Survey GIS Mapping Presentation through DWR
•	KHMT Meeting	•	8/30/2013	 Hazard Mitigation Projects update Local Hazard Mitigation Plans update USACE update Recent Flooding Update through DWR PDM/FMA updates State Hazard Mitigation Plan Update 2013 Projects Rating Core Team and Scoring Criteria
•	KHMT Meeting	•	05/15/2013	 Hazard Mitigation project update Mitigation Planning Update State Hazard Mitigation Plan Update (AMEC) Flood Mitigation Pilot projects/dam and levee safety program update through USACE
•	KHMT Meeting	•	2/13/2013	 Hazard Mitigation Projects update Local Hazard Mitigation Plans update NFIP Insurance Changes State Mitigation Plan Update Silver Jacket Projects/Proposals

Table 2.2 documents the state agencies, local, tribal, and federal stakeholders that participated in the 2018 plan update process by attending meetings, providing date and commenting on the plan drafts. As demonstrated in this table, there were additional stakeholder representatives that attended planning meetings that are not normally part of the KHMT. Sign-in sheets indicating specific representatives in attendance are available in the Supplemental Documentation maintained by KDEM.

Table 2.2 Participation of Agencies in the 2018 Planning Update Process

Adjutant General's Department X X X X X X X X X X X X X X X X X X X	Agency/Association	09/26/2017 Mtg	12/13/2017 Mtg	03/29/2018 Mtg	Provided data/ comments on draft plan chapters
Kansas AGD, Division of Emergency Management X	State Agencies		*		
Management X	Adjutant General's Department	Χ	Х	Х	Х
Kansas Department of Agriculture	· · · · · · · · · · · · · · · · · · ·	v	٧	Y	Y
Kansas Department of Commerce x X X X X X X X X X X X X X X X X X X					
Kansas Department of Corrections	· · · · · · · · · · · · · · · · · · ·				
Kansas Department of Labor X X X X X X X X X X X X X X X X X X X					
Kansas Department of Health and Environment X Kansas Department of Transportation X X X X Kansas Department of Wildlife, Parks & Tourism X X X X X Kansas Department for Children & Tamillies X X X X X X X X X X X X X X X X X X X	of Corrections	Χ	Χ		X
Health and Environment Kansas Department of Transportation Kansas Department of Wildlife, Parks & Tourism Kansas Department for Children & Tamillies Kansas Department for Children & Tamillies Kansas Division of Emergency Management Kansas Division of Emergency Management Kansas Geological Survey Kansas Geological Survey Kansas Highway Patrol X	Kansas Department of Labor	Χ	Х		X
Transportation X X X Kansas Department of Wildlife, Parks & Tourism X X X Kansas Department for Children & Families X X X X X X X X X X X X X X X X X X X	·				х
Wildlife, Parks & Tourism X X X X X X X X X X X X X X X X X X X				X	х
Families X X X X X X X X X X X X X X X X X X X		Х	Х		х
Management X X X Kansas Forest Service X X Kansas Geological Survey X X X Kansas Highway Patrol X X X X Kansas Historical Society X X X X Kansas Insurance Department X X X X Kansas State Fire Marshal's Office X X X Kansas State University X X X X Kansas Water Office X X X X Kansas Wildlife, Parks & Tourism X X X X University of Kansas—Biological Survey X X X X Local Stakeholders X X X X Kansas Association for Floodplain Management X X X X Kansas Association of Counties X X X X Kansas Electric Cooperatives X X X X X		Х	Х		х
Kansas Geological Survey X X X X X X X X X X X X X		Х	Х	Х	x
Kansas Highway Patrol X X X X X X X X X X X X X X X X X X X	Kansas Forest Service				
Kansas Historical Society X X X X X X X X X X X X X X X X X X X	Kansas Geological Survey			Х	Х
Kansas Insurance Department X X X X X X X X X X X X X X X X X X X	Kansas Highway Patrol	Χ	Х	Х	Х
Kansas State Fire Marshal's Office X Kansas State University X X X X X X X X X X X X X	Kansas Historical Society	Χ	Χ	Χ	Х
Fire Marshal's Office X X X X X X X X X X X X X X X X X X X	Kansas Insurance Department	Χ	Χ	Х	Х
Kansas Water Office X X X X X X X Kansas Wildlife, Parks & Tourism X X X X X University of Kansas— Biological Survey X X X X X X Local Stakeholders Kansas Association for Floodplain Management X X X X X X Kansas Association of Counties X X X X X X Kansas Electric Cooperatives X X X X X X					X
Kansas Wildlife, Parks & Tourism X X X University of Kansas— Biological Survey X X X X X Local Stakeholders Kansas Association for Floodplain Management X X X X X Kansas Association of Counties X X X X X Kansas Electric Cooperatives X X X X X	Kansas State University	Х	Х		Х
University of Kansas— Biological Survey X X X X X X Local Stakeholders Kansas Association for Floodplain Management X X X X X X Kansas Association of Counties X X X X X X Kansas Electric Cooperatives X X X X X X	Kansas Water Office	Х	Х	Х	Х
Biological Survey X X X Local Stakeholders Kansas Association for Floodplain Management X X X X X Kansas Association of Counties X X X X X X	Kansas Wildlife, Parks & Tourism	Х	Х		X
Kansas Association for Floodplain Management X X X X Kansas Association of Counties X Kansas Electric Cooperatives X X X X X X	-	Х	Х		х
Management X X Kansas Association of Counties X X Kansas Electric Cooperatives X X X	Local Stakeholders				,
Kansas Association of Counties X X Kansas Electric Cooperatives X X X X X X		X	Х		X
		Х			Х
	Kansas Electric Cooperatives	Х	Х	Χ	Х
	Kansas Emergency	Х	Х	Х	Х

Agency/Association	09/26/2017 Mtg	12/13/2017 Mtg	03/29/2018 Mtg	Provided data/ comments on draft plan chapters
Management Association				
Kansas Rural Water Association	X	X		Х
League of Kansas Municipalities	Х	Х		Х
State Association of Kansas Watersheds	Х	Х		х
Tribal Stakeholders				
None				
Federal Stakeholders				
FEMA Region VII	Х	Х	Х	
National Weather Service—Topeka	Х	Х		Х
U.S. Army Corps of Engineers— Kansas City District	Х	Х	х	Х

Plan Review and Analysis

During the 2018 plan update, the KHMT updated each section of the previously approved plan to include new information and format the plan's contents. To ensure each section met the FEMA state plan update guidance, the KHMT analyzed each section. **Table 2.3** is the schedule of the draft KHMP reviewed for the plan update of 2018.

Table 2.3. Timeframes for Draft KHMP Reviews

•	Draft KHMP to Review	•	Timeframe for Review
•	Draft Risk Assessment Part 1 and 2, 20 hazards	•	December 13, 2017 – January 13, 2018
•	Draft Risk Assessment, Two Hazards, local roll- up, and state facilities vulnerability, Strategy	•	March, 2018
•	FEMA Region VII for review	•	July, 2018

Feedback was received via multiple channels to include: email, written, phone calls. The information was collected and analyzed by the planner and the KHMT and incorporated into the plan, as appropriate, to create a final draft for state adoption and then submittal to FEMA Region VII for review and approval.

Table 2.4 summarizes the changes that were captured since the previous plan approval.

Table 2.4. Summary of Changes

Plan Section	Update Review and Analysis
1.0-1.5 Introduction	1. Reviewed for accuracy and updated to meet FEMA Requirements
2.0-2.3 Planning Process	 Described planning process for 2018 update, including coordination among agencies and integration with other planning efforts. Updated Risk Map content
	3. Reviewed for accuracy and updated
3.1 Risk Assessment Overview	1. Updated section to meet FEMA requirement to analyze growth and development trends.
	2. Updated population and housing unit growth trends with the latest data available at county level, with estimated future populations.
	3. Climate Change and resiliency were added.
	4. Updated declaration tables and figures by disaster.
3.2 Identifying Hazards	1. Reviewed list of hazards from 2013 with methodology to determine planning significance.
	2. Updated declaration table and figures by disaster.
	3. Updated all tables and figures to reflect most current available information.
3 Hazard Profiles and State Risk	Updates for All Hazards
Assessment	1. Hazard profiles were updated with additional information on previous events.
	2. Revised vulnerability assessment and state estimates of potential losses and also reported by county within each hazard section/
	 3. USDA Risk Management Agency insured crop loss data updated and added to each natural hazard profile wher available. 4. Updated HAZUS 4 was utilized to better analyze earthquake, flooding, hazardous materials, and dam and leve failure. 5. Included Climate change.
	Hazard Specific Updates
	1. All hazard tables and figures have been updated with most current information available. All hazards information has been updated from the 2013 plan.
3.4 Integration of Local Plans: Vulnerability and Loss Estimates	1. Reviewed hazard profiles and risk assessments from 12 Regional plans to summarize the percentage ranking of the hazards, number of high, moderate, low and not rated hazards in regional plans, and flood loss estimates and vulnerability.
3.5 State Owned and Operated Facilities: Vulnerability and Loss Estimates	1. GIS-based vulnerability analysis and associated loss estimates were completed for four hazards: dam and leve failure, earthquake, flood, and hazardous materials. Vulnerability of state facilities to all other hazards was included based on vulnerability of counties and numbers and values of state facilities within high/medium-high vulnerability counties.
3.6 References	Updated based on data sources used.
4.1 Goals and Objectives	1. Reviewed goals and objectives from the 2013 plan and concluded that they were still representative of the state's mitigation strategy.
4.2 State Capability Assessment	1. Updated the state capabilities, both pre and post disaster, and how these capabilities have changed since the previously approved plan.
	2. Updated any changes in state funding capability and policies addressing development in hazard-prone areas.
4.3 Local Capability Assessment	Reviewed capability assessments in Regional plans to develop a general description of local capabilities. Analyzed effectiveness of local capabilities.
4.4 Mitigation Actions	Documented progress of state mitigation actions since the previously approved plan and added a column as to how the action reduced the risk. 2.Identified new actions
4.5 Funding Sources	Updated primary funding sources with information provided by agencies to include the HMGP Post Fire Grant
5.1 Local Funding and Technical Assistance	Updated information on the status of Regional plan completion.

	2. Described how the State provided planning and technical assistance to local governments over the last five years.
5.2 Local Plan Integration	1. Describes the linkage with the regional plans and the KHMP.
5.3 Prioritizing Local Assistance	Describes the criteria KDEM uses to determine project eligibility and prioritize projects. Assessed the challenges and success of prioritization.
6.0-6.2 Plan Maintenance Process	Reviewed procedures for monitoring, evaluating, and updating the plan and determined only minor changes were required to the schedule for plan monitoring.

2.2 Coordination among Agencies

Requirement 201.4(b): The [State] mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, and interested groups.

The Update plan should describe how the State interacted with all levels of government as indicated above. It should also describe how coordination among agencies changed since approval of the previous plan.

Members of the KHMT participated in the update process by attending planning meetings, providing data and information, and commenting on the draft version of the plan. The KHMT continues to change as more agencies attend and participate in the quarterly meetings, thus growing and becoming a stronger force over time. In conjunction with the regular business of each KHMT meeting, state and federal agencies rotate presentations about initiatives within their respective agency. The KHMT also invites private entities to present on subjects relating to mitigation, such as the presentation on the earthquake of Nepal during the March, 8 2016 meeting. In The State of Kansas, federal agencies, private non-profit organizations, stakeholder associations, and local agencies continue to use all forms of communication to coordinate a multitude of tasks whether it is day-to-day or major disasters in the State.

One specific example of coordination and collaboration that occurs through the KHMT is regular participation of a representative from the U.S. Army Corps of Engineer's Silver Jacket Program. The Lead Silver Jacket Coordinator for Kansas directly represents the Kansas City District and participates on the KHMT representing all the USACE districts within the State. The district's Emergency Management Branch staff also regularly attend. The Lead Silver Jackets Coordinator has made a significant effort to coordinate with other federal agencies, attending the KHMT quarterly meetings, and completing USACE projects. The Silver Jacket Program has done three types of special projects, including Public Involvement Pilots, Levee Safety Program Pilots, and pilots for the Interagency Nonstructural projects pilot, which now occurs regularly.

Missouri River (Leavenworth) – flood forecast inundation maps (including pilot for levee overtopping)

- Wildcat Creek-flood forecast inundation maps, three new gages, a warning light for Scenic Drive, and floodplain management plan having a watershed perspective
- Emergency Action Plans (EAP) for Watershed Districts 20 EAPs for locations
- Cross Creek-flood forecast inundation maps
- Big Blue and Kansas Rivers' Confluence flood forecast inundation maps and floodplain management plan, including integration of the Manhattan Levee and Tuttle Creek Reservoir
- Nonstructural Measures for Kansas' Little Apple-nonstructural assessment of buyouts, relocations, home elevations, detailed assistance with public involvement, and general feasibility evaluation of other flood proofing

- Missouri River Flood Event Mapping enhanced unsteady modeling for use collaboratively
 with NOAA NWS and to improve on efficiency of almost real time mapping (8-hour turn
 around) for use during future flood events between Rulo, NE, and St. Louis on the river
- Osawatomie Levee Safety Interagency Project table top exercise and risk assessment possible leading to an EAP
- Pottawatomie County-floodplain management plan and flood forecast inundation map

Projects currently on-going during the 2018 plan update are as follows:

- Florence nonstructural assessment
- Repetitive Loss Update quality review of the database of properties at risk of flooding and plan formulation of mitigation measures
- Recurring Flood Area ID and Outreach a collaborative effort KHMT co-leads with NOAA NWS to review recent flood events and enhance forecasting abilities to help mitigate those location using a comprehensive and shared database
- High Water Mark Signs-provides an opportunity for communities to get a sign that KDWR and USACE partner with the Kansas Historical Society, NOAA NWS, and USGS in developing a story that enhances risk communication and directly addresses cognitive bias and public understanding of the risks, using historic photos and high water marks
- Manhattan Levee Safety-a table top exercise combined with risk communication and enhancing the mitigation measures for the current floodplain management plan and EAP
- Salina Levee Safety-a table top exercise combined with risk communication and enhancing the mitigation measures for a possible floodplain management plan and EAP

The adjacent state agencies for Dam Safety were contacted to gather information concerning dam inundation areas that affect Kansas for this plan update. This includes the states of Colorado, Missouri, Nebraska, and Oklahoma.

Hazard mitigation planning involves multiple government agencies, private, professional and voluntary organizations as well as commerce and industry. The KHMT understands the importance of this planning process and having an approved State Hazard Mitigation Plan in Kansas.

Of special note, the coordination among Federal and State agencies has grown stronger since the approval of the 2013 plan. EMAP, Regional Mitigation Plans, Risk MAP, Silver Jackets, etc. have all played a part in the enhanced coordination among State and Federal partners. In addition, due to various training and educational opportunities, local governments are more engaged, and becoming more interested and active in pursuing mitigation projects.

2.3. Integration with Other Planning Efforts, Programs, and Initiatives

Requirement 201.4(b): [The State mitigation planning process] should be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

The State of Kansas is committed to the multi-agency mitigation strategy outlined in this plan. Details on additional related planning programs and initiatives are discussed and highlighted in Section 4.2 State Capability Assessment.

- This plan is related to the following state-level plans and programs
- Continuity of Operations Plan, coordinated by KDEM
- Drought Response Team Operations Plan, coordinated by the Kansas Water Office
- Floodplain Management Program, coordinated by Kansas Division of Water Resources
- Kansas State Water Plan, coordinated by the Kansas Water Office
- Kansas Response Plan, coordinated by KDEM
- Kansas Hazard Mitigation Grant Program Administrative Plan, coordinated by KDEM
- Kansas Planning Standards, coordinated by KDEM
- Kansas GIS Strategic Plan, coordinated by the Adjutant General's Department
- Kansas Forest Action Plan, coordinated by the Kansas Forest Service
- Kansas THIRA, coordinated by KDEM

Information from each of these plans/programs is utilized within the applicable hazard sections in chapter 3. In particular, this mitigation plan supplements and supports the projects identified in the Kansas Water Plan that contribute to mitigation of drought, flood, and soil erosion hazards. The Kansas Water Plan is coordinated by the Kansas Water Office and involves multiple state agencies. For each federally declared disaster, the State of Kansas Hazard Mitigation Grant Program (HMGP) Administrative Plan outlines the state's policies and procedures for using post-disaster HMGP funds, which could be used to fund some of the actions identified in this plan.

The State mitigation planning process is also integrated with other FEMA mitigation programs and initiatives as follows:

- FEMA National Flood Insurance Program
- FEMA RiskMAP Program
- FEMA Hazard Mitigation Assistance Grants
- FEMA Public Assistance, Section 406 Hazard Mitigation

The mitigation plan is linked with Kansas Department of Agriculture Division of Water Resources (KDA-DWR) programs to manage FEMA's Floodplain Management Program, which includes the National Flood Insurance Program and the coordination of the statewide floodplain mapping activities. As of February 2018, 460 communities participate in the National Flood Insurance Program (NFIP), including 72 that do not have special flood hazard areas and 121 that are only minimally flood-prone. In the 2013 plan update there were 13 communities

participating in the CRS program, in this 2018 update there are 37 Kansas communities that participate in the NFIP Community Rating System (CRS) and this number is growing larger every year.

The Kansas Division Water Resources provides floodplain management information and technical assist to help local offices in participating communities. It also encourages non-participating communities to join the NFIP. There are seminars throughout the year on topics such as Basics of the NFIP, Elevation Certificates and Letters of Map Amendment, Floodplain Mapping, Post Flood Responsibilities, Substantial Damage Estimation, Independent Study, and new CRS Coordinator's Manual changes. These seminars have been instrumental in increasing the number of communities participating in both of these programs. The following seminars were completed in cooperation with the Federal Floodplain programs:

Elevation Certificates and Letters of Map Amendment –

- 2013 Emporia, Bel Aire, Wamego, Lyons, Great Bend
- 2014 Parsons, Hutchinson, Oskaloosa, Chapman, Burlington
- 2015 Erie, Hays
- 2016 Wellsville, Kinsley, Lindsborg
- 2017 Topeka, Dodge City, Wichita

Basics of the National Flood Insurance Program:

- 2013 Ellsworth, Pratt, Paola, Fort Scott
- 2014 Frontenac, Junction City, Garden City, McPherson, Colby
- 2015 Iola, Clay Center, Wichita, Garnett
- 2016 Larned, Holton, Council Grove
- 2017 Oskaloosa, Hutchinson
- 2018 Manhattan, Park City

Substantial Damage Estimator Overview:

- 2013 Emporia
- 2015 Emporia, Clay Center
- 2016 Emporia

Violations and Enforcement in the Floodplain:

- 2015 Topeka, Ellsworth
- 2016 Hutchinson, Marysville, Overland Park, Eureka
- 2017 Lyons, Humboldt
- 2018 Ottawa

Post Flood Responsibility

- 2017 Junction City, El Dorado
- 2018 Salina, Lenexa

Mold Issues After Flood:

• 2014 – Olathe

Full Day Basics and Elevation Certificates:

• 2016 – Garden City

Community Rating System (Insurance Service Office)

• 2017 - Wichita

Nonstructural Flood Proofing Workshop (Army Corps of Engineers):

- 2016 El Dorado
- 2017 Lawrence

River Boundaries and Unnumbered Zone A Determinations

• 2017 – Dodge City

Substantial Damage Estimation (Federal Emergency Management Agency)

• 2018 - Topeka

The Kansas Department of Agriculture - Division of Water Resources (KDA-DWR) administers FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program in Kansas that creates Flood Insurance Rate Maps (FIRMs) and uses the flood risk data and tools to communicate risk to local citizens and enable communities to enhance their mitigation efforts. To date, the Lower Republican, Lower Little Blue, Lower Big Blue, and the Lower Kansas watersheds have been completed.

In addition to the completed watersheds, 9 countywide and Community-based FIRMs have become effective since 2014:

- Atchison County
- Leavenworth County
- Wyandotte County (Lower Kansas)
- Douglas County (Lower Kansas)
- Riley County
- Geary County
- Washington County (Lower Little Blue)
- Cloud County (Lower Republican)
- Clay County (Lower Republican),
- Miami County
- Sedgwick County
- Marshall County (Lower Big Blue),
- Saline County, and

• City of Marion

Watersheds and counties in-progress in the Risk MAP program include:

- Cow Creek (Barton/Rice/Ellsworth Counties)
- Montgomery County
- Lower Smoky Hill (Dickinson/Ottawa (partial)/McPherson (partial)/Ellsworth (partial)
 Counties
- Middle Kansas (Wabaunsee/Pottawatomie (partial) Counties)
- Wilson County
- Reno County (Reno County (partial), Cities of Hutchinson, South Hutchinson, Nickerson, and Willowbrook
- Ellis County
- Lower Cottonwood (Chase/Marion (partial) Counties)
- Neosho Headwaters (Lyon/Coffey Counties, Cities of Council Grove and Dunlap
- Upper Marais des Cygnes (Franklin, Anderson, Osage (partial Counties, City of Baldwin City

Base Level Engineering (BLE) data development in progress in the Risk MAP Program Include:

- Brown County
- Nemaha County
- Solomon Watershed
- Chikaskia Watershed
- South Fork Ninnescah Watershed

Current Levee Projects:

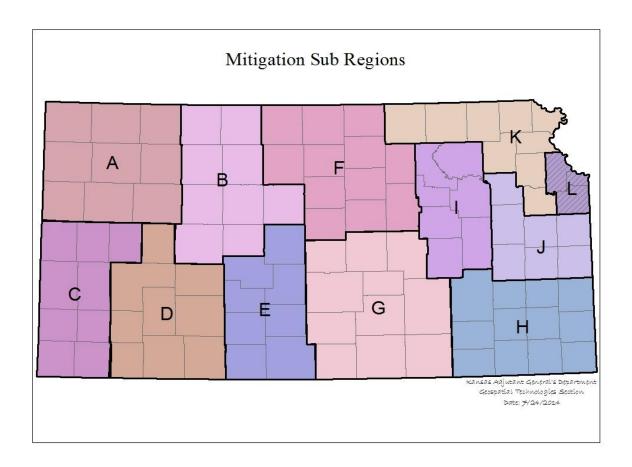
- City of Florence
- City of Osawatomie
- City of El Dorado
- City of Augusta
- City of Caney
- City of Coffeyville
- City of Blue Rapids
- City of Frankfort
- City of Gypsum
- City of Ottawa
- City of Topeka
- City of Dodge City

2.3.1. Integration with Local Plans

KDEM is the primary state coordinating agency for all local emergency operation plans and hazard mitigation plans. The division has the primary responsibility of working with local governments in developing, reviewing, and updating local hazard mitigation plans. As of 2018 all counties are included in a Regional Mitigation Plan with the exception of Greenwood County. These regional plans meet the requirements of both the Disaster Mitigation Act of 2000 and the National Flood Insurance Program's Community Rating System program. Greenwood County has expressed a strong desire to be in the updated Regional plan in 2019.

The regional plan strategy is described in Chapter 5, Coordination of Local Mitigation Planning. The State Hazard Mitigation Plan feeds the regional hazard mitigation planning concept, specifically in the way it is written. Hazard analysis are presented in a Regional formal, which includes all the counties for that particular region. This concept was utilized throughout the plan in order to help facilitate the writing of the regional plans. The twelve Kansas Mitigation Planning Regions can be viewed in **Figure 2.5.**

Figure 2.5. Kansas Mitigation Planning Regions



2.3.2. Challenges in Integration

This 2018 update reflects the integration of 100% of the regional plans for the State of Kansas. While Greenwood County elected not to participate in the Region H plan, they have expressed their intention of participating in the 2019 update. However, the region that Greenwood County resides in does have a Regional Plan.

Significant challenges to plan integration during the writing of the regional plans was the inconsistency in the methodologies used and the hazards that were addressed. With the advent of the regional plans this challenging issue was done away with. The most challenging issue for this plan update as it relates to the regional plans is the data roll up due to the amount of actions, gaining a broader stakeholder engagement with the process, implementation of the actions within the plan and lack of funding for those implementations. In addition, many of our stakeholders wear multiple hats that often put them at odds with mitigation participation and implementation. It is not uncommon to have an emergency manager also doing duty as the Sheriff, Fire Chief, or Flood Plain Manager which oftentimes precludes them from attending meetings. While these challenges are not insurmountable, they do present unique opportunities to find work arounds and to think outside the box. Another challenge is getting stakeholders and the public to mitigation meetings. Specifically, those counties in western Kansas that don't see a lot of funding availability through local budgets. Because they don't see their projects being accomplished, the interest is not as high as the rest of the state. This is an issue that needs to be addressed with the Kansas Hazard Mitigation Team and the emergency managers.